

REMARKS

Claims 1-3, 5, 6, 8, 9 12-15, 18-24 remain in this application. New claims 22-24 have been added. Support may be found in the original claims as filed and also in FIGS. 2 and 3 and pages 6-9 of the specification. Claims 4, 7, 16 and 17 have been cancelled. Claims 1, 3, 12 and 14 have been amended. No new matter has been added.

In view of the above amendments and remarks that follow, Applicant respectfully requests favorable consideration and timely indication of allowance. Reconsideration and allowance of the pending claims in view of the following remarks are respectfully requested.

Claims 1-9 and 12-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Adams, US Patent Number 6, 594,366 (hereinafter referred to as “Adams” or “Adams reference”). Applicant respectfully traverses.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP § 2131 (citing Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). “The identical invention must be shown in as complete detail as is contained in the ... claim.” Id. (citing Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). In addition, “the reference must be enabling and describe the applicant’s claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention.” In re Paulsen, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Regarding new claims 22-24, the reference cited by the Examiner does not fairly teach or suggest, inter alia, “an apparatus for selectively reducing power consumption in an audio codec,” as claimed. For example, the control processor 208 controls switches S1 and S2 (see FIG. 3) and also microphone switch 262 (see FIG. 2). However, Adams does not fairly teach that processor 208 selectively reduces the power consumption of audio codec as claimed.

Second, Adams does not fairly teach or suggest, “a stereo/mono control unit having a first input for receiving an audio multiplexer input that identifies whether a signal provided to the audio codec by the audio multiplexer is one of voice, stereo music, and mono music,” as claimed in new claim 22. Adams uses a sensor 210 to detect the presence or absence of one or more types of 2.5 millimeter plugs (see col. 3, lines 34-38 and col. 3, lines 62 to 64). Specifically, Adams employs a sensor/detection circuit 210 of FIG. 4 to determine whether two 8-ohm receivers are present or whether there is one 8-ohm receiver and another of a higher impedance

(e.g., > 10-kohm) (see col. 4, lines 26 to 29). The control processor 208 only receives a single input, which is the output from sensor 210. This input, as clearly set forth in Adams, is an indication whether a 106/108 corresponding to a headphone 101 or headset 103 (see FIG. 3) is present. However, this input to control processor 208 does not fairly teach or suggest, “a first input for receiving an audio multiplexer input that identifies whether a signal provided to the audio codec by the audio multiplexer is one of voice, stereo music, and mono music,” as claimed.

Moreover, this input to control processor 208 does not fairly teach or suggest, “a second input for receiving a plug-in detection input that identifies whether an audio output device coupled an I/O jack is stereo capable or mono capable,” as claimed in new claim 22. A signal that indicates whether the attached headphone or headset is not the same and does not fairly teach or suggest an input for indicating whether an audio output device is stereo capable or mono capable. It is noted that the headphone 101 of Adams can be either stereo capable or not. Similarly, the headset 103 of Adams can be either stereo capable or not. In other words, the mere identification that the device is a headphone 101 or headset 103, which is the determination made by Adams audio I/O sensor 210, is not in itself determinative that the connected device is stereo capable or not. If the next Action persists with this rejection, it is respectfully requested that the next Action point out the specific portions relied upon to disclose the as claimed.

Regarding amended claim 1, the reference cited by the Examiner does not fairly teach or suggest “stereo/mono control unit that provides a control output to a codec based on the determined type of the audio output device and the identified type of the signal.” It is respectfully submitted that those portions cited by the Action do not fairly teach or suggest all the claimed limitations.

Col. 1 lines 43 to 65 is directed to explaining a two channel sensing circuit of Adams that is utilized to detect whether a headphone or headset is installed (see lines 45 to 53). Adams uses the following algorithm to determine which component is installed. When both channels are low impedance, the sensing circuit determines that a stereo headphone is installed. When both channels are high impedance, then the sensing circuit determines that nothing is installed. When one channel is low impedance and other channel is high impedance, then a telephone headset is installed (see col 1, lines 60-64). Col. 3 line 46 to col. 4, line 25 describes the position of

specific switches as shown in FIG. 3 when it is determined that the headphone 101 or headset 103 is installed.

In the Adams reference, sensor 210 is configured to detect the presence of two different types of plugs (a first type of plug for a cell phone 106 and a second type of plug for a stereo headset 108. *(See col. 3, lines 62-64)* For example, sensor 210 includes “circuits to detect the presence of one or more types of 2.5 mm plugs.” The Adams system uses a switching unit 203 “to switch between AM/FM radio 202, the cell phone 200 output and input functionality.” The Adams system also uses a microphone switch 262 “to switch the microphone 128 on or off.” *(See col. 3, lines 41-45 and col. 3, line 62 to col. 4, line 45 of the Adams reference).*

However, claim 1 recites “a stereo/mono control unit receives an audio mux input identifying a type of a signal that the codec received from the audio mux, and the stereo/mono control unit provides a control output to the codec wherein the determined type of audio output device is one of a stereo capable device and a mono capable device.” The Adams reference does not fairly teach or disclose identifying a type of a signal that the codec received from the audio mux, and providing a control output to a codec based on the determined type of the audio output device and the identified type of the signal, as recited in the claim 1.

Specifically, it is respectfully submitted that Adams does not appear to fairly teach or disclose providing a control output based on “the identified type of the signal” as claimed. As argued previously, the only “identification” performed by the Adams’ sensing circuit is whether the I/O plugs or jacks correspond to a headphone 101 or a headset 103. Furthermore, ach or suggest the stereo/mono control unit as claimed. Moreover, Adam does not appear to fairly teach or suggest providing a control output based on the determined type of the audio output device, wherein the determined type of audio output device is one of a stereo capable device and a mono capable device, as claimed. .

If this rejection is maintained, perhaps, the Examiner can point out a specific portion of Adams that teaches identifying a type of signal and “providing a control output to a codec based on the determined type of audio output device and the identified type of signal,” as claimed.

Claims 2-9 depend either directly or indirectly from claim 1. As such, Applicants submit that claims 2-9 are patentable as written over the cited reference for at least the same reasons as those provided above in connection with claim 1. Accordingly, Applicants respectfully request that the rejection of claims 1-9 be withdrawn.

Regarding claim 12, Adams fails to teach or suggest, “determining a type of the received audio signals; and providing a control output to disable or enable a first channel in a receive audio processing path based on the type of the audio output device and the type of the received audio signals,” as claimed in claim 12.

Claim 12 recites claim limitations that are similar to the limitations set forth in claim 22. In particular, claim 12 recites “wherein the type identifies whether a signal provided to the audio codec by the audio multiplexer is one of voice, stereo music, and mono music,” which as argued previously is not fairly taught or suggested by Adams. Moreover, claim 12 recites “providing a control output to disable or enable a first channel in a receive audio processing path based on the type of the audio output device and the type of the received audio signals,” which as argued previously is not fairly taught or suggested by Adams. As such, Applicants submit that claim 12 is patentably distinct from the cited reference for at least the same reasons as those presented above in connection with claim 1.

Claims 13-21 depend either directly or indirectly from claim 12. As such, Applicants submit that claims 13-21 are patentable as written over the cited reference for at least the same reasons as those provided above in connection with claim 12. Accordingly, Applicants respectfully request that the rejection of claims 12-21 be withdrawn.

Thus, claim 1-9 and 12-21 distinguish over the art of record. Accordingly, it is respectfully submitted that the rejection of claims 1-9 and 12-21 under 35 U.S.C. §102(e) should be withdrawn.

In view of the foregoing, it is respectfully submitted that the application and all of the claims are in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

Respectfully submitted,

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